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EXTENSION SERVICE

# REVIEW

U.S. DEPARTMENT OF AGRICULTURE \* AUGUST 1970

WATER - PAGE 2

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*The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.*

*The Review offers the Extension worker, in his role of educational leader, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.*

**CLIFFORD M. HARDIN**  
*Secretary of Agriculture*

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Prepared in  
Information Services  
Extension Service, USDA  
Washington, D. C. 20250

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The Extension Service Review is published monthly by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. Use of funds for printing this publication approved by the Director of the Bureau of the Budget (July 1, 1968).

The Review is issued free by law to workers engaged in Extension activities. Others may obtain copies from the Superintendent of Documents, Government Printing Office, Washington, D. C., 20402, at 15 cents per copy or by subscription at \$1.50 a year, domestic, and \$2.25, foreign.

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## EXTENSION SERVICE

# REVIEW

*Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.*

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## Using water resources

Water . . . when we turn a faucet, we expect it to come frothing forth. When we go to the shore, we know we'll see a lot of it. And once in a while we expect to see dark clouds roll up and deliver us a torrent of it. It's a resource we generally take for granted.

Four of the articles in this issue of the Review deal with instances where water is not being taken for granted. In Minnesota, an area of previously negligible agricultural value is being transformed into a "bonanza" spot because the landowners became aware of what irrigation could do. Nebraskans who have had a slim ration of usable water for years are organizing to pipe it to all parts of their counties for the first time. They're as enthusiastic as if it were liquid gold. And finally, two articles from Oregon tell about a project that is dealing with water from another aspect—how to make the best use of our most abundant water resource, the oceans.

Extension is deeply involved in all these projects and in many others like them. Natural resources are in the spotlight now, as the public becomes increasingly aware of their scarcity and the need to use them well. Many agencies and organizations offer help to citizens interested in improving resource use, and Extension can help communities take advantage of it.—MAW

# Good program deserves good followup

by  
Earl J. Otis  
*Extension Information Specialist  
Washington State University*



*George Fahey, retired Seattle businessman, keynoted the program. Here, he goes over last minute details with Extension home economics program aide Ann Werner.*

The impact of a recent consumer education conference in Seattle was only beginning when the participants went home. Josephine Lawyer, King County agent, went at her assignment with enthusiasm from the onset—but the story really is one of continuing vigor *after* the event.

Mrs. Lawyer drew on talents from several places to stage the conference. Joan Bergy, consumer specialist with the Food and Drug Administration, was co-coordinator. The State Attorney General's office, the University of Washington, and her own Washington State University helped Mrs. Lawyer weld together a program that was warmly received and highly praised.

The 500 citizens from western Washington who were present represented a jump of 200 from the event's initial effort a year earlier.

But the memory lingers on.

A letdown would have been natural after such a program, but Mrs. Lawyer plunged into a resume of the entire

episode. The result is a 59-page booklet that not only examines the birth of such a meeting, but also bestows the kind of thanks that should make future sponsorship and assistance easy and inevitable.

The booklet includes pictures, published news articles, radio spots, preliminary programs, and letters. All aspects of the conference are examined in detail. Copies of the rather exclusive publication went to the offices of the Governor, a U.S. Senator, the mayor of Seattle, Extension supervisors, and others.

Mrs. Lawyer also sent questionnaires to all who attended. Although she thinks the questionnaires could have been sent out sooner, 128 of the participants responded. Of these, 84 were educators, 21 represented women's groups, 11 represented themselves, nine represented businesses, and five were regional media representatives.

The answers showed that the material learned at the consumer conference had been used:

- as teaching tools,
- for discussions with staff,
- in preparation of news articles,
- in a booklet distributed to 200 employees,
- as the basis for a "mini-conference."

And one Seattle television station developed an entire half-hour program on the buying of meat, one of the conference subjects.

Other program subjects, incidentally, were also "hot" items and probably explain why the conference was so well attended. Clean air, cyclamates, auto insurance, and consumer buying decisions were covered, and at least the first two were current page one subjects in almost everybody's newspaper.

Besides picking topical subjects, Mrs. Lawyer and Mrs. Bergy "just happened" to schedule their conference to coincide with an in-service training day for educators in Washington's Puget Sound country. Extension agents from the four-county area around Seattle helped encourage the attendance of these people and others.

It was a good meeting. But, more than that, it was given that little something extra after the fact—a difficult task to accomplish but one that can lead to "bigger and better" events in the future. □



by  
Lyle Ross  
*Area Resource Development Agent  
Minnesota Extension Service*  
and  
William Oemichen  
*RC&D Project Coordinator  
Soil Conservation Service*



*Above, regular contributors to the "Bonanza Valley Voice" are (left to right) Lyle Ross, area Extension agent, resource development; Herman Rosholt, vice chairman of the valley's steering committee; Orville Gunderson, area Extension agent, soils; and John Morris, Pope County Extension agent. At right, Ross talks to one of nine farmers in a pilot farm management program to help ease the transition from dryland to irrigated farming.*

"Forget it. You're wasting your time." This was the prevalent opinion at early meetings about irrigation for what was to become known as the Bonanza Valley.

The situation did seem hopeless for the 320 sections of Minnesota glacial outwash sand and gravel located in the western Minnesota counties of Pope, Stearns, and Kandiyohi.

In spite of an average annual rainfall of 22 inches, the heat of July and August ruined the crops in four out of five years. A 40-bushel corn crop was considered about average.

With 50 irrigators farming 5,000 irrigated acres last year, the tempo has quickened. Irrigated crop yields have opened eyes and opportunities. Like word of a gold strike, you hear that one farmer had a 150-bushel corn crop or another farmer produced 8,000 pounds of snapbeans to the acre.

Development of the area was approved as part of the WesMin (West Central Minnesota) Resource Conservation and Development Project. Authorization came from the RC&D Project Committee, the Pope County Soil and

Water Conservation District, and the Board of County Commissioners.

A number of Federal and State agencies have cooperated in the development. Businessmen and Extension workers from the Golden Sands Irrigation Area in Wisconsin gave generously of their time in consultation and education about sandy soil irrigation.

Information about soils and underground water was provided by the U.S. Geological Survey and Soil Conservation Service. With this information, irrigation development can proceed with confidence.

Extension agents in the area feel that the agricultural development of the Bonanza Valley offers them their best opportunity to participate in RC&D action.

In helping to meet the Valley's development needs, Extension agents are using a wide range of activities—

meetings and tours; bulletins, news articles, and pictures; committee work and personal consultation.

The Bonanza Valley Irrigation Clinic provides an annual infusion of new ideas and inspiration for the irrigators, both prospective and experienced. Pope County Agent John Morris and Area Soils Agent Orville Gunderson have worked closely with the Bonanza Valley Steering Committee, the Soil and Water Conservation Districts, and other agencies in organizing the clinics.

County Agents Francis Januschka and Ronald McCamus of Stearns and Kandiyohi Counties have helped conduct programs intended for the new irrigators.

The three-county resource area is treated as a unit for development. The attitude of Extension agents and other agency personnel is that whoever is in a position to help goes ahead with the job. Morris, for example, has organized

# Bonanza Valley—bust to boom



irrigation tours that cross county lines. An evening tour took place last year, and a fly-in tour is among those planned for this year.

"An Investigation of Irrigation in the Bonanza Valley" is a special bulletin being published for the area. It contains information for farmers and businessmen about underground water, soils, and crop evaluation. For farmers, it should facilitate the transition from dryland to irrigated farming. Businessmen will find it a detailed inventory of the irrigation resources of the area.

A group of Extension agents helped write a public information brochure for mailing and handout. The printing was done by the electric power suppliers of the Bonanza Valley.

The need for a regular means of irrigation communication stimulated businessmen in the town of Brooten to start a newspaper. "The Bonanza Valley

Voice" was edited by a grocer until sold to a 20-year-old editor. Extension agents and specialists regularly contribute articles and pictures.

The Bonanza Valley Steering Committee, made up of farmers and businessmen, has contributed a great deal towards the development of the area. The Steering Committee determines policy and action for development.

In the past it has raised funds, selected the "Bonanza Valley" name, investigated new crops and markets, encouraged irrigation equipment service, and started an irrigators' association.

Herman Rosholt, a 79-year-old retired farmer, served as the first chairman and led fundraising and organizational efforts. Now vice chairman of the Steering Committee, he is also a member of the RC&D Project Committee.

The present chairman is John Bohmer, a banker in Brooten. Having membership open to businessmen involves them in total development of the resource area. The seven members of the committee represent the three counties on a proportional basis.

Extension agents cooperate with the committee in many ways. In the search for new crops and markets, Morris has traveled many miles with committee members. Gunderson recently surveyed crop drying facilities so the committee can evaluate the corn market of the area. And all agents take part in the business sessions.

Two members of the Bonanza Valley Steering Committee are in an irrigation farm business group. These 10 irrigators receive recordkeeping help, farm busi-

ness analysis, and farm management consultation on the farm for a cost of \$50 per year. The Extension Area Resource Development Agent organizes and conducts this activity now, but the Irrigators' Association will take responsibility for an enlarged farm business group in the future.

This intensive farm management consultation is only one form of person-to-person work being done. Agents and specialists provide their usual services. Due to the quickening of the tempo, in fact, Extension agents are spending more time in the Bonanza Valley than before.

The work is far from complete, of course. The same needs are there; they have only shifted in relative importance. They are:

- adoption of advanced technology by experienced and prospective irrigators,
- well drillers and irrigation equipment service,
- long term credit,
- markets for corn and specialty crops,
- further underground water research.

Is it worth it? Or is it a waste of time? It is estimated that there will be an increased annual gross income of \$5 million for the area when irrigation is fully developed. That is the crop bonanza alone—to say nothing of further economic activity generated by the new income.

One speaker remarked after the last session of the Irrigation Clinic, "It was refreshing to mix with an optimistic group of farmers like this." They have reason for their optimism. □



# Nebraskans organize rural water districts

by  
Grant I. Johnson  
Assistant Extension Editor  
University of Nebraska



*Pawnee County farmer Dale Mach rigged up this apparatus to drain water off his barn into a cistern for his hogs. He and other county farmers were happy to cooperate with County Agent Duane Dalluge, shown in the background here, to get a good water system for the county.*

Dale Mach, who farms in Pawnee County, Nebraska, would like to expand his swine operation, but can't.

The reason? Water.

Mach has no well on his farm that he can depend on, so he drains the water off his big barn into a cistern to water a few hogs. For water for the house, he gets an 800-gallon load from Pawnee City every other month.

On a nearby farm, Clark Hunzeker is a little better off. He had six wells drilled during the winter of 1968-69 and got one

well that provides 2 gallons of water per minute for his 22-cow dairy herd.

The water from this well is very high in minerals, but he has another well that provides enough better quality water to take care of household needs.

The stories of Mach and Hunzeker can be repeated many times throughout a four-county area in southeastern Nebraska.

Pawnee, Johnson, Richardson, and Nemaha Counties have been economically damaged because of the lack of

water on their farms. And some of their small towns are hurting, also.

The farmers can raise good crops of corn and milo—but then the grain must be moved to areas where the water supply will support large scale feeding operations.

With the grain inevitably goes capable young people and businesses. Drained off also is the net worth of farms. Hills that should be pastures are cropland because there is no water for the cattle that should be grazing them.



Farm wives wash clothes in laundromats in town.

But citizens in these counties are moving energetically to set up rural water districts (RWD's) to produce water and pipe it to subscribing farmers.

Extension Service resource development specialists and county agents have been deeply involved in the complicated business of getting the RWD's set up and financed.

Ed Henderson, area resource development specialist stationed at Humboldt, has been a key figure in guiding people in the counties through the legal and governmental red tape. The Farmers Home Administration and the Soil Conservation Service also have played a big part.

Nemaha Rural Water District No. 1 was the first to act after the legislature passed the authorizing law. Construction has already started toward delivering precious water to thirsty farms from a well on the eastern edge of the district.

Four more RWD's are being organized—one in each of the four counties.

Rural water districts have been incorporated into a preliminary study prepared for the Southeast Nebraska Regional Planning Commission by a consulting engineer firm preparing a comprehensive plan for the 4-county area.

They are working under contract with the Nebraska Department of Economic Development, with financial support from the U.S. Department of Housing and Urban Development and the FHA.

Information on water supplies and geology are provided by the Conserva-

tion and Survey Division of the University of Nebraska.

The process of bringing a rural water district to life can be illustrated by the Pawnee County RWD, which includes the entire county. The county Technical Action Panel started the action.

County Agent Duane Dalluge, a TAP member, and Charles Matzke of the Pawnee County Bank conducted a survey of the 804 farms in the county, using the mailing list and facilities of the county ASC office. The survey showed that landowners were enthusiastic about forming the water district.

To encourage the formation of an organization, the TAP organized a tour of districts in Kansas. Farmers, newsmen, businessmen, Extension agents, and other Government agency representatives went along and were impressed by what they saw.

They formed a steering committee, and got the volunteer services of a local lawyer to draw up a petition containing the exact legal description of the proposed district.

Next came the big job of locating and contacting landowners. Identifying them was almost a job for a detective, involving not only absentee owners, but also husband-wife owners and heirs to estates. As many as 15 signatures of heirs might be required, since each person with a legal interest in a piece of property must sign the petition.

Dalluge and his secretary spent days in the county courthouse digging the needed information out of the records.

After the county clerk had determined that more than 50 percent of the land-

owners had signed the petitions, a time for a hearing was set by the county commissioners.

At this time a copy of the petition and notice of the time and place of the hearing was sent to the State Director of Water Resources, who must approve the formation of a district before the county commissioners can grant it.

Each petitioner had to be sent a notice of the meeting by registered mail. Dalluge says they sent out about 600 letters at a cost of about 36 cents each.

He estimates that about 7,000 other letters have been mailed, just to keep people informed of progress.

After the hearing, the county commissioners approved the project, and a nine-member board of directors was elected for the district.

A preliminary design study by an engineering firm was financed by \$25 contributions from prospective users. This contribution was to be applied to the estimated \$175 hookup fee that would be charged each subscriber when the lines were in. With the data from the study, the district was eligible to apply for a loan from FHA.

The 40-year loan will take care of 95 percent of the funding, with the remainder to be paid from the hookup fees. Cost of a pressure system has been estimated at \$1,086,202.

By summer 1969, 371 users had signed up and paid contributions ranging from \$25 to \$200. Businessmen also contributed to the fund. Three towns have indicated an interest in buying water from the district.

Thus, though Nebraska is blessed with abundant ground water, not all Nebraskans share in this abundance. Nor do all Nebraskans share equally in the income the water brings to the State.

The average net income in Pawnee County is only half the average for the State and lack of water is a major contributing factor to this lag.

But through the organization of a rural water district, Pawnee County people and their counterparts throughout southeast Nebraska are doing something about it. □

# Harnessing the ocean's potential . . .

## county agents in hip boots

Oregon Extension agents and specialists are at the forefront of a surging wave of interest in the ocean, helping people in their State wisely develop and use their marine resources.

Although a good deal is known about the ocean, the record is not very impressive when it comes to *using* what we know. Oregon Extension workers are providing a link between people who use the ocean and others who have information that would help solve the many problems encountered.

Some conscientious scientists, of course, take it upon themselves to communicate results of their work to people who are interested. And some people with problems relating to the sea diligently sift out the information they need. But until recently there have been few broad-based efforts to transfer technical information from source to user.

The originator of the Sea Grant concept recognized this situation. Dr. Athelstan Spilhaus set forth the idea of a program to develop the economic, scientific, recreational, and aesthetic potentials of the sea. He called for "county agents in hip boots to take the findings of the marine scientists to . . . accomplish the true use of the sea for and by people."

Sea Grant program legislation enacted in 1966 incorporated Spilhaus' concept of marine advisory services.

by  
Gwil O. Evans  
*Marine Science  
Information Specialist  
Oregon State University*

In essence, the act—now administered by the National Science Foundation—calls for instruction, practical demonstrations, publications, and related activities aimed at communicating information to people interested in developing marine resources, to scientists, and to the general public.

Oregon State University was designated one of the Nation's first three Sea Grant centers. It organized its Sea Grant effort along the lines of a land-grant institution—with research, teaching, and extension activities.

The portion of the OSU Sea Grant organization devoted to extension work is named the OSU Marine Advisory Program. Organizationally, its staff members are part of the university's Extension Service. Functionally, they are partners and equals with Sea Grant teachers and researchers.

Extension work in marine areas in Oregon did not wait for Sea Grant. As early as the 1940's, home Extension agents were showing consumers how to use foods from the sea for tasty, nutri-



tious meals. Work in the 1960's brought Extension specialists in shellfisheries and economics to aid an ailing oyster industry. The first full-time fisheries Extension agent went to work in 1967.

By the time the university won Sea Grant designation, more people were taking an interest in marine resources and the needs for assistance were greater.

Three major factors guide Oregon State's Marine Advisory Program. These factors are reflected not only in the selection of staff members, but also in

continued on page 14

*These two articles about Oregon's Marine Advisory Program are the fourth and fifth in a series about Extension's wildlife work. Next month—how Georgia helps land-owners benefit from the income-producing aspects of wildlife.*





*Thanks to the Marine Advisory Program, Extension home economists, above, get a tour of a major seafood processing plant. At right, OSU Extension oceanographer Dan Panshin (left) and marine Extension agent Bob Jacobson (center) discuss an Albacore Central bulletin and chart with a tuna fisherman.*



## 'Albacore Central'

by  
Daniel A. Panshin  
*Extension Oceanographer  
Sea Grant  
Oregon State University*

"OSU Albacore Central Daily Summary." So began each of 92 consecutive daily radio messages Oregon State University sent to the fishing fleet last summer.

Oregon's commercial fishery for albacore tuna is large and valuable. From July into early October, the fast-swimming fish are available from 50-100 miles offshore of Oregon. In 1968, the last year for which final figures are in, landings amounted to 37,752,000 pounds worth about \$7.5 million at dockside, the result of fishing by a fleet of about 750 boats. Little is known, however, about the complex factors which determine abundance and distribution of albacore.

Scientists and fishermen know that albacore are temperature sensitive, preferring surface waters in the temperature range of 59°F to 65°F. But water within this temperature range does not guarantee presence of albacore. Scientists and fishermen would like to know more about just what conditions control albacore distribution within this acceptable band of temperature.

**continued on page 15**



## New Jersey's supermarket seminars

New Jersey has strengthened its Extension marketing program by working more closely with food retailers.

The Supermarket Seminar Program is one example of this change in program emphasis at the College of Agriculture and Environmental Science of Rutgers University.

In 1967 the supermarket industry called on the college to help them develop and conduct educational programs. The industry indicated a need for more and better trained people. They were finding it difficult to attract and hold qualified personnel in a highly competitive labor market.

Located between New York City and Philadelphia, New Jersey has experienced phenomenal growth in population. The expansion of food chain organizations in the State has kept pace with this population growth. Many headquarters of major food chains are located in New Jersey or are only a short distance away.

One of the first steps taken towards helping the industry was to enlist its cooperation. The result was the formation of an advisory committee with representatives from each of the major chain store organizations serving the New Jersey metropolitan area.

A report from this committee suggested that Rutgers develop a self-improvement program for middle management people such as department heads, managers, and supervisors. The industry representatives acknowledged that top management benefits educationally from industry-sponsored conventions and seminars, and reasoned that middle management would similarly benefit from such training.

The advisory committee recommended that the program do the following things:

- Provide an opportunity for instructional sessions,

- Create in the students a recognition of the importance of their job in serving the public,

- Familiarize the students with sources of information and how to use them,

- Develop in the students an awareness of problems in the supermarket industry and propose some practical solutions,

- Motivate each student to seek further involvement in educational endeavors both within and outside his company.

The recommendations led to a comprehensive program of several subject area seminars to give students a broad exposure to all retailing areas.

Topics selected for the seminars were economics of the food industry; recruitment, selection, and training; human relations; effective management and supervision; merchandising opportunities; advertising and promotion; sanitation; security; and general sessions on specific departments such as dairy, meat, and produce.

Thus the course progressed from the idea stage to a program of 14 seminars, held one evening a week for 2-1/2 hours on the University's campus in New Brunswick.

The teachers were selected for both their knowledge of the subject area to be discussed and their ability to instruct and motivate students. Technical spe-

cialists are not always effective communicators.

Instructors included Extension staff such as Nicholas Pintauro in food science; Wallace Mitcheltree, community life specialist; and John Bezpa, poultry specialist. Other college speakers were members of the teaching and research staff of the Department of Agricultural Economics and Marketing.

Instructors also were recruited from chain store organizations, private business, and the New Jersey departments of health and agriculture.

The pooling of talents from different backgrounds and interests provided the students with a wide exposure to a variety of topics and teaching methods.

Finding the students was probably the least difficult phase of the program. They were notified of the course by word-of-mouth, articles placed in industry magazines by the college's Communications Center, and brochures that were direct-mailed to supermarket headquarters.

A good cross-section of companies appeared in every class. For most of the participants, this was their first contact with university-related programs.

Since the seminar began in 1967, 336 students have participated in the four sessions. A fifth session is scheduled for 1970.

The group size is limited to 75. The first seminar, which was larger, became dominated by lectures. Much of the effectiveness of student participation, which is so essential to the learning process, was lost.

Certificates of completion for the course are awarded to students with a satisfactory record of attendance who



*Fred Perkins, above left, Extension marketing specialist, and course instructor Alan Meredith, third from left, discuss labeling requirements with students. Below, Perkins accompanies students to an egg packing facility to see handling practices firsthand.*

also pass the examination given at the close of the 14-week session.

A \$45 fee for the course covers all expenses, including handout materials and a concluding banquet. Most companies reimburse tuition costs for students completing the course satisfactorily.

The degree to which each session and instructor relates to the needs of those attending is constantly appraised. Each student submits comments on each instructor and topic, along with suggestions for improving the course.

As the program has grown, food retailers have been quick to indicate additional needs.

More specialized in-depth programs have been high on the list. To date, one-day schools have been held for poultry and eggs, meat sanitation, and work method analysis. All have met with excellent response.

Another fulfillment of the needs of the food retailing industry has been applied research programs to give management a better tool for decisionmaking.



One 8-week pilot study was conducted with a major New Jersey chain store organization. It indicated how one store could realize savings of more than \$9,000 a year by adopting the latest in sanitation-management practices in the meat department. This information is reviewed with the seminar participants.

Largely through the Cooperative Extension Service the retail food industry in New Jersey now has improved liaison with its State university. This is evident in the added number of requests

received since the seminar course was initiated. Requests for information vary from technical and economic-related questions concerning the food industry to advice on growing tomatoes in the home garden.

Probably for the first time members of the food retail industry in New Jersey are becoming more aware of the total resources available to them from their State University through the Cooperative Extension Service and its State and county programs. □



by  
Mary V. Cheze  
*Extension 4-H Specialist*  
and  
Ray Woodis  
*Communications Specialist*  
*University of Illinois*

## 4-H'ers 'do their own thing'

Young people today continually seek "relevance" in their activities. They complain that their education is "irrelevant" and that church and community activities are "meaningless." And many drop out of 4-H programs after 2 or 3 years because the program no longer stimulates or challenges them.

Illinois' answer to the teenage challenge is "Do Your Own Thing!" "Do Your Own Thing" is more than a new project. It's a chance for young people to become creative and explore areas not covered by regular 4-H projects and activities. It recognizes that each young person has individual abilities, interests, needs, background, and home situation. No single list of projects and project requirements can possibly meet the individual needs and interests of all 4-H'ers.

While the self-determined project concept was developed primarily to maintain the interest of older 4-H boys and girls, it also has obvious merit as 4-H moves into urban areas.

The self-determined nature of "Do Your Own Thing" reflects the shifting character of today's young people. Better educated, exposed to more experiences and ideas, wealthier, and with more leisure time, many young people are ready to move faster and farther than the pace and limits set by traditional 4-H Clubs.

Here's how "Do Your Own Thing" works.

At 15, John Louie has completed photography, entomology, and geology projects. He has extended these activities to the point where all he can do is add to his collections.

John contacted Bob Curry, Tazewell County assistant Extension adviser, to find out what he could do. The answer: "Do Your Own Thing!" John drew on his interest in astronomy—an area in which Illinois has no readymade 4-H project—and came up with his own self-determined 4-H project.

Most of the technical information John needed came from an observatory at nearby Peoria. He has his own telescope, and passed an examination qualifying him as an associate astronomer, which made it possible for him to use the observatory facilities. And he joined the observatory's astronomy club.

John used his 4-H photographic talents and traveled to Georgia and Florida to take pictures of the moon landing site and the sun's total eclipse through observatory facilities in those States.

How do you report on a "Do Your Own Thing" project? John is working out his own essay-type record for his astronomy activities. And he'll share what he's learned with others. Right now he's planning an exhibit for the Illinois State Fair in August. The exhibit will include

posters, charts, and diagrams as well as some of the photographs John has taken.

Where does he go from here? Well, the sky's the limit in "Do Your Own Thing." John is building his own observatory. And he's on a comet hunt. John's ambition is to discover a new comet and have it named after him. He'd like to do this by State Fair time, but this is one factor he can't program into his "Do Your Own Thing" activity.

John Louie's "Do Your Own Thing" project may be a far-out example. But it shows what 4-H'ers can do with self-determined projects.

"Do Your Own Thing" gave John the opportunity to explore a project area not included on the list of 4-H projects. For others, it's a chance to explore in depth more traditional project lines.

A young lady in Henry County is "doing her own thing" by continuing her 9 years in 4-H clothing projects and expanding into the area of dress design and construction from design.

Linda Oberle is a two-club 4-H member and carries projects in home economics and agriculture. But her primary interest in "Do Your Own Thing" is clothing design.

A Dress Revue delegate to the 1969 National 4-H Congress, Linda started sewing when she was 3 1/2 by sneaking upstairs to the family sewing machine "when mother wasn't looking." She made Christmas decorations and dolls' clothes until old enough to belong to 4-H.

Linda's "Do Your Own Thing" project results in clothing for herself, her mother, and a sister that is designed around each individual's personality. In Linda's words, "The project gives me a chance to express myself. The clothes I design and make are an expression of my creativeness as an individual. I feel that fashion design serves to develop and broaden my interests while I learn."

Once a design is committed to construction, Linda follows it through complete outfits. Her mother and sister provide encouragement and support for her "Do Your Own Thing" projects as well as serving as willing models.



Incidental to expression and creativity are the savings on the family clothing bill.

In September, Linda will enroll at the University of Illinois in home economics. But she says she may later change to the art curriculum because she feels it may offer more ideas and principles that apply to clothing design.

And there's no question about Linda's future. Her "thing" will be a career in fashion design.

Whether it's a totally new area or an in-depth continuation of an existing 4-H project, "Do Your Own Thing" works the same way. The young person assesses

his personal interests, skills, and abilities and the facilities or resources available. Then he decides what suits him best. After selecting a project area, the 4-H'er sets his own goals and decides what he wants to learn from the project.

Then, with help and guidance from parents, local leaders, and county Extension personnel, a project is developed. Realistic goals and study programs based on resources and resource personnel available in the area are defined.

Some method for evaluating progress is built into the project. The "Do Your Own Thing" project member is encour-

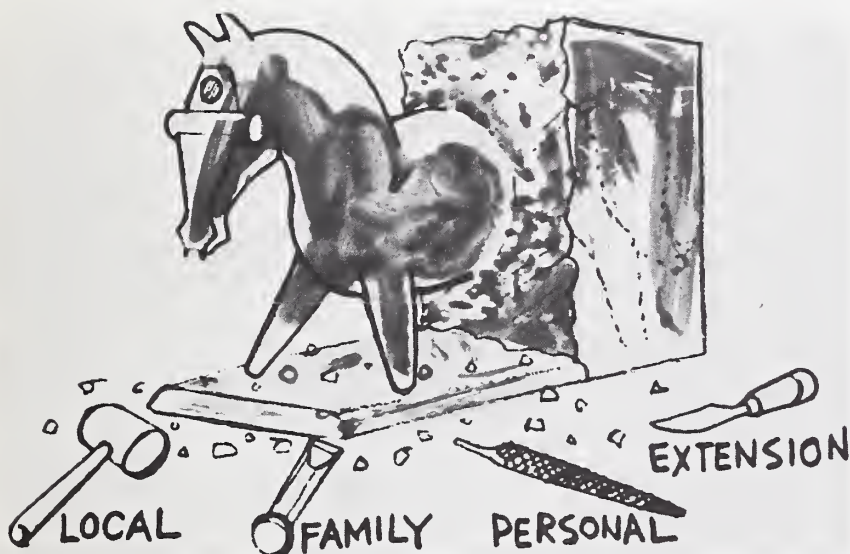
aged and aided in devising a method to record and report progress toward the goals he has set. Traditional 4-H reporting forms often do not fit the bill. Each member develops a method of reporting that fits his particular project area and goal.

"Do Your Own Thing" has not been accepted by all leaders and county Extension personnel in Illinois. Some local leaders see "Do Your Own Thing" as the source of extra work and time demands. Others feel that they lack the talent needed for more sophisticated and varied project activities.

But with a "Do Your Own Thing" project, the burden is on the project member. It's his "thing"—he selected the project, he set his own goals and developed his own method of evaluating and reporting. The 4-H leader, in this case, provides encouragement and guidance. The young person is responsible for finding resource people, study matter, and necessary materials.

Many Extension advisers feel that "Do Your Own Thing" will make its greatest impact on new 4-H members and leaders, especially as the 4-H program expands into more urban areas. New leaders seem to be particularly attracted to the idea.

"Do Your Own Thing" may not be the whole answer. But when an Illinois 4-H member says "What can I do?"—there is an answer. □



*These illustrations are from a 17-slide series used to present "Do Your Own Thing" to 4-H'ers and leaders. The visuals and script were done by Ed Vernon, Extension specialist in instructional resources, and Bill Edwards, artist on the agricultural communications staff.*

You  
Make  
The  
Decisions



## county agents in hip boots

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the manner in which the program is organized and conducts its business.

—The Marine Advisory Program uses proven Extension techniques to take advantage of the resources the Extension affiliation offers. The techniques include providing consultation; arranging and conducting workshops, town hall meetings, and demonstrations; organizing community advisory committees; helping develop leaders among the resource users; and issuing publications.

County agents provide communications with the coastal communities as well as a source of knowledge of local situations. In addition, the advisory program's relationship with county Extension staffs helps provide legitimacy and credibility for Marine Advisory Program staff.

—The Marine Advisory Program is "people-oriented." Staff members are selected not only on the basis of their professional competence, but also for their interest in and ability to work with people. Agents and specialists spend much time becoming personally acquainted with their marine public. From this acquaintance, needs are identified and programs structured.

Before marine agents attempt to establish programs, they literally "work the waterfront." They strike up a conversation with a salmon fisherman aboard his vessel, they're out before dawn helping load crab pots on another boat, they sit in on fishermen's bargaining sessions, and they drink coffee in

waterfront gathering places. It takes this kind of rapport to establish mutual trust and understanding.

—The Marine Advisory Program uses a systems approach. Problems related to the wise use of the ocean resources almost invariably are interdisciplinary. So staff members have been chosen for the broadest possible experience and professional base.

The 10 staff members today are qualified in shellfisheries and coastal development, fisheries, business management, seafood technology, industrial engineering, oceanography, marine economics, marine science education, and information programs. Making the systems approach work requires the highest level of teamwork and exchange of information among Marine Advisory Program staff members.

Despite the breadth of its competency, the staff sometimes is confronted with problems beyond its capability. When that happens, resource people at the university, in government agencies, or in industry are called on for assistance.

The Marine Advisory Program is only slightly over 2 years old. It has identified its primary clientele in Oregon as the extraction industries (primarily fishing), the seafood processing industry, and port, land, and other marine developers. A broader audience, generally considered secondary clientele, is the general public, especially students.

Programs for these clientele are widely varied. Town hall meetings bring together for the first time fishermen, scientists, and representatives of regulatory agencies.

Informal sessions conducted by the marine economist with leading fishermen in each port result in the preparation of Marine Economics Data Sheets. The sheets are valuable tools in helping any fisherman make sound management decisions about his fishing business.

The seafood technologist works with processing plants to maintain and improve levels of sanitation that will assure the highest quality products. The industrial engineer also has coastwide responsibilities and works closely with seafood processors to improve efficiency

and raise still higher the sanitation and product quality standards.

Cooperating with fishermen, researchers, government agencies, and industry, the Marine Advisory Program sponsors Albacore Central, an environmental reporting service that broadcasts daily messages and publishes weekly bulletins for the tuna fishing fleet. It is directed by the Extension oceanographer.

The programs that reach the most people are the ones conducted by the marine science education specialist. He is in charge of the university's museum-aquarium at the OSU Marine Science Center on the central Oregon coast. Nearly three-quarters of a million people have toured the public wing of the center since it was opened 5 years ago.

The marine science education specialist not only supervises the displays and aquaria, but he also develops programs for the public to encourage understanding and appreciation of the marine environment. More than 12,000 school children each year take part in graded, programmed educational visits to the Marine Science Center.

Common to all these programs is the two-way flow of communications: from the resource user through the Marine Advisory Program to the scientist or other source of information and back to the user. Aiding the information transfer is an on-going publications program that provides information valuable to both primary and secondary clientele.

Thus, the Oregon State University Marine Advisory Program is a mechanism for the transfer of needed technical information to help man put the ocean to work. It functions from a broad base of expertise, emphasizing that people play the most important part. A successful advisory program requires the involvement of government and industry as well as the continuing support of its university.

At a time when more people are turning toward the sea and expecting more from it, OSU's Marine Advisory Program is a viable, necessary ingredient for harnessing the potential of Oregon's ocean. □



# 'Albacore Central'

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During the summer of 1969, therefore, Oregon State University conducted an extensive albacore oceanography project in the northeast Pacific Ocean. The immediate concern was to improve the efficiency of the U.S. tuna fleet. One of the phases of the project was Albacore Central.

Albacore Central was run by OSU's Marine Advisory Program, extension arm of the Sea Grant Program and part of Oregon's Cooperative Extension Service. The objective of Albacore Central was to respond to the critical need of Pacific Northwest fishermen for timely oceanographic and environmental information. Albacore Central attempted to meet this objective by:

- Making available material from the Bureau of Commercial Fisheries, and

- Supplementing this material with local information, much of it research-derived and acquired by OSU from aircraft, research vessels, Fish Commission of Oregon, fish plants, Weather Bureau, Marine Advisory Program coastal agents, and fishermen themselves.

Fishermen are a hard-to-reach audience. During fishing season fishermen are where the fish are. They don't receive mail regularly, if at all. They aren't available to attend meetings. And they can't be visited.

The challenge was to get the needed information to the fishermen promptly and directly.

The prime product of Albacore Central was a daily radio message on ocean

conditions and marine, or open-ocean weather. In 1969, Albacore Central transmitted 92 messages through the Astoria Marine Operator, a radio station operated by Pacific Northwest Bell Telephone Company, seven days a week, from July 1 through October 1.

The Astoria Marine Operator acts as a radio telephone service for ships at sea. A ship wishing to place a call establishes radio contact with Astoria and the operator then connects the radio circuit to a telephone circuit to complete the call. A person ashore wishing to call a ship at sea reverses the process.

Most of the time the Astoria Marine Operator serves this telephone function. But twice a day, at 10:15 a.m. and 10:15 p.m., there are broadcasts on coastal weather and hazards to navigation. Fishermen listen to this station regularly at these times because of the importance of the information to them and the long reception range of 300-500 miles.

By permission of the Federal Communications Commission, Pacific Northwest Bell made public-service time available to OSU at the end of these broadcasts for the Albacore Central messages.

A secondary, or supporting, product of Albacore Central was a weekly printed bulletin which discussed oceanography as it pertains to albacore, and an accompanying sea-surface temperature chart. The advantage of radio messages is the rapidity with which information can be delivered; the disadvantage is that in a 3- to 5-minute message only highlights can be discussed.

A written bulletin can be much more thorough, and a chart can present detail and continuity of information impossible to put into words. The disadvantage of bulletin and chart, of course, is that they must be mailed, and somehow delivered to the fishermen in order to be useful.

The first place fishermen go on entering port is to the fish plant to sell their fish. So the Marine Advisory Program agents contacted all fish plants along the Oregon coast and secured their generous cooperation. Each week for 13 weeks bulletins and charts were bulk-mailed to fish plants for hand distribution to fishermen. In this way, fishermen re-

ceived the bulletin and chart upon reaching port. The information may have been a little older than in the messages, but it was much more detailed, and thus supported and amplified the radio messages.

The MAP coastal agents were crucial. The "county agents in hipboots" are stationed in or near each of the major Oregon fishing ports. They contacted fishermen to encourage them to keep logbooks for research purposes and to share practical information which might be of value to other fishermen.

They regularly interviewed fishermen who came into port so that Albacore Central could be evaluated continuously and made as responsive as possible. They assisted in distribution of charts and bulletins. One agent went out on a fishing trip to learn firsthand more about the problems and techniques of the albacore fishery.

Evaluation was a regular part of the program. In addition to interviews during the season, the Marine Advisory Program mailed out questionnaires in November to over 400 fishermen, receiving nearly a 40 percent return to date. In December, evaluation and planning meetings were held in four Oregon fishing ports.

Albacore Central, and the whole albacore project, would have been impossible without the help of the fishermen. The cooperation and encouragement of a host of Federal and State agencies and private companies were essential, too. In this regard, the Bureau of Commercial Fisheries was especially helpful because of its long experience with this special kind of fisheries service.

Was Albacore Central a success? In general, fishermen approve of Albacore Central. Mistakes were made in 1969; changes will be made in 1970.

Albacore Central served to establish rapport and to open up lines of communication for Sea Grant with the fishing community. Researchers helped fishermen and fishermen helped researchers. Albacore Central was a door-opener, demonstrating the potential of a partnership between researchers, the Marine Advisory Program, and fishermen. □





# What is past is prologue

Forty years ago this past May, a new publication came off the press. It was called the Extension Service Review.

Volume 1, Number 1, May 1930, featured on its cover a photograph of the new administration building of the U.S. Department of Agriculture. Secretary of Agriculture Arthur M. Hyde moved his office into the new quarters in that month. The building was billed as "a marvel of convenience and architectural beauty . . . one of the most attractive buildings in Washington."

In an introductory article, C. W. Warburton, Director of the USDA Extension Service, explained why the Extension Service Review was necessary. He pointed out that the Extension Service, with an annual budget of \$25,000,000 and 5,800 employees, needed a means of internal communication. Efforts to establish a national Extension publication had been underway since 1915, he said. He gave credit for materializing the longtime goal not only to people in the Extension Service, but also to Milton S. Eisenhower, director of the USDA Office of Information.

The person who got the Extension Service Review off on the right foot is one whose name is familiar to most Extension workers—Reuben Brigham. He became Extension editor and 4-H Club agent at the University of Maryland as soon as the Smith-Lever Act set up the Extension Service, and was called to the Washington office in 1917 to develop an editorial and visual aid service for Extension editors. He helped build Extension information programs throughout the country. He had much to do with the formation of the American Association of Agricultural College Editors, who honor him yearly by presenting their "Reuben Brigham Award" to an outstanding communicator. Brigham went on to be assistant director of the USDA Extension Service. This was the man who was editor of the Extension Service Review during its first 4 years.

The Review had the opportunity to bring some exciting messages to Extension workers during those early years of

publication. The second issue—June 1930—featured "Radio, the new Extension aid." And the following month, an article about the advent of "talking pictures" drew this comment from the editor: "The talking picture comes over the extension horizon. The possibilities in this new medium of instruction intrigue us. They suggest how the thought and personality of the extension leader may be projected with their original force and vitality to audiences far beyond those now reached. Speculation on the teaching possibilities of the talking picture might be continued indefinitely. Suffice it to say that here is a medium worth watching."

The Review has passed through many hands since then, and the topics have evolved from radio and "talkies" to communications satellites. Forty years from now, perhaps Review readers will look back and call the things we discuss today "quaint." But we trust that the magazine is at least keeping up with the times and serving the purposes for which it was created.

Reuben Brigham expressed those purposes in the initial issue: "It is the intention of the service to keep this periodical on a high plane and to endeavor to reflect in its columns the accomplishments and methods of the extension forces. The Review is planned to be the spokesman of the entire service, and we trust that the workers in the field who are on the front line of extension activity will make this publication their own. It will publish from time to time pertinent articles concerning extension work contributed by outstanding leaders. It will carry stories of accomplishment in all the fields it serves, and will outline methods of procedure that have proved to be valuable in extension teaching. The Review not only welcomes contributions from the field but urges its readers from every State to supply timely stories on extension activities. It is hoped that this publication may prove a faithful and vivid record of extension progress and development."

He could just as well have been writing for today.—MAW